(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 12 May 2005 (12.05.2005)

PCT

(10) International Publication Number WO 2005/042703 A2

(51) International Patent Classification7:

C12N

(21) International Application Number:

PCT/US2004/034966

(22) International Filing Date: 22 October 2004 (22.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10/691,468

22 October 2003 (22.10.2003) US

- (71) Applicant (for all designated States except US): UNI-VERSITY OF PITTSBURGH OF THE COMMON-WEALTH SYSTEM OF HIGHER EDUCATION [US/US]; 200 Gardner Steel Conference Center, Thackeray And O'Hara Streets, Pittsburgh, PA 15260 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): STROM, Stephen, C. [US/US]; 4382 Maryville Drive, Allison Park, PA 15101 (US). TOSHIO, Miki [JP/US]; 4316 Gladstone Street, Pittsburgh, PA 15201 (US).
- (74) Agent: CASSON, Lawrence, P.; Kenyon & Kenyon, One Broadway, New York, NY 10004 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PLACENTAL STEM CELLS AND USES THEREOF

(57) Abstract: The present invention features novel placental stem cells and provides methods and compositions for the therapeutic uses of placental stem cells or placental stem cells that have been induced to differentiate into a desired tissue type into a recipient host in amounts sufficient to result in production of the desired cell type, e.g., hepatocytes, neural cells, pancreatic cells, vascular endothelial cells, cardiomyocytes.

